

# SEARCH NOTES

=> s UCP and plant and uncoupling  
L1 139 UCP AND PLANT AND UNCOUPLING

=> duplicate remove l1  
DUPLICATE PREFERENCE IS 'AGRICOLA, BIOSIS, EMBASE, CAPLUS'  
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=> s l2 and inhibitor  
L3 4 L2 AND INHIBITOR

=> d l3 1-4 ibi ab  
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L3 ANSWER 1 OF 4 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
ACCESSION NUMBER: 2003:512052 BIOSIS  
DOCUMENT NUMBER: PREV200300515111  
TITLE: A signalling role for 4-hydroxy-2-nonenal in regulation of  
mitochondrial **uncoupling**.  
AUTHOR(S): Echtay, Karim S.; Esteves, Telma C.; Pakay, Julian L.;  
Jekabsons, Mika B.; Lambert, Adrian J.; Portero-Otin,  
Manuel; Pamplona, Reinald; Vidal-Puig, Antonio J.; Wang,  
Steven; Roebuck, Stephen J.; Brand, Martin D. [Reprint  
Author]  
CORPORATE SOURCE: MRC Dunn Human Nutrition Unit, Hills Road, Cambridge, CB2  
2XY, UK  
martin.brand@mrc-dunn.cam.ac.uk  
SOURCE: EMBO (European Molecular Biology Organization) Journal,  
(August 15 2003) Vol. 22, No. 16, pp. 4103-4110. print.  
ISSN: 0261-4189 (ISSN print).  
DOCUMENT TYPE: Article  
LANGUAGE: English  
ENTRY DATE: Entered STN: 5 Nov 2003  
Last Updated on STN: 5 Nov 2003

L3 ANSWER 2 OF 4 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
ACCESSION NUMBER: 1998:323638 BIOSIS  
DOCUMENT NUMBER: PREV199800323638  
TITLE: Development of infrared imaging to measure thermogenesis in  
cell culture: Thermogenic effects of **uncoupling**  
protein-2, troglitazone, and beta-adrenoceptor agonists.  
AUTHOR(S): Paulik, Mark A. [Reprint author]; Buckholz, Richard G.;  
Lancaster, Mary E.; Dallas, Walter S.; Hull-Ryde, Emily A.;  
Weiel, James E.; Lenhard, James M. [Reprint author]  
CORPORATE SOURCE: Dep. Metabolic Diseases, GlaxoWellcome Inc., 5 Moore Drive,  
Research Triangle Park, NC 27709, USA  
SOURCE: Pharmaceutical Research (New York), (June, 1998) Vol. 15,  
No. 6, pp. 944-949. print.  
CODEN: PHREEB. ISSN: 0724-8741.  
DOCUMENT TYPE: Article  
LANGUAGE: English  
ENTRY DATE: Entered STN: 22 Jul 1998  
Last Updated on STN: 22 Jul 1998

L3 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2003 ACS on STN  
ACCESSION NUMBER: 2002:408796 CAPLUS  
DOCUMENT NUMBER: 137:1546

US 2003150022 A1 20030807 US 2001-823886 20010330  
PRIORITY APPLN. INFO.: US 2000-193533P P 20000331

=> s l2 and infection  
L4 1 L2 AND INFECTION

=> d l4 1 ibib ab

L4 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2003 ACS on STN  
ACCESSION NUMBER: 2001:748022 CAPLUS  
DOCUMENT NUMBER: 135:285935  
TITLE: Transgenic **plant** expression  
**uncoupling** protein (UCP) for  
metabolism regulation  
INVENTOR(S): Berry-lowe, Sandra Lee; Newell, Martha Karen  
PATENT ASSIGNEE(S): University Technology Corporation, USA  
SOURCE: PCT Int. Appl., 72 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001075131	A2	20011011	WO 2001-US10236	20010330
WO 2001075131	A3	20020314		
WO 2001075131	C2	20021227		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,  
CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM,  
HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, LC, LK, LR, LS, LT,  
LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,  
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ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM  
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BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

US 2003150022 A1 20030807 US 2001-823886 20010330  
PRIORITY APPLN. INFO.: US 2000-193533P P 20000331

AB The invention relates to methods and products for manipulating  
**plant** metab. and resistance to **infection**. Several  
foreign **uncoupling** protein (UCP) genes were expressed  
in cell wall of Chlamydomonas reinhardtii in wild type. Increased levels  
of **UCP** have been detected in wild type, light sensitive, a  
photosynthetic mutant alga grown in darkness, and norflurazon treated  
algae. Furthermore, increased levels in the wild type stain made  
light-sensitive by treatment with herbicide norflurazon have been obsd.  
The invention prove Des evidence the presence or absence of **UCPs**  
in membranes regulates the fuel metab. in **plants**.

=> s l2 and transform?  
L5 5 L2 AND TRANSFORM?

=> d l5 1-5 ti

L5 ANSWER 1 OF 5 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI Development of infrared imaging to measure thermogenesis in cell culture:  
Thermogenic effects of **uncoupling** protein-2, troglitazone, and  
beta-adrenoceptor agonists.

L5 ANSWER 2 OF 5 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI Mutagenesis of the **uncoupling** protein of brown adipose tissue.

Neutralization of E190 largely abolishes pH control of nucleotide binding.

L5 ANSWER 3 OF 5 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
TI FUNCTIONAL EXPRESSION OF THE RAT BROWN ADIPOSE TISSUE **UNCOUPLING**  
PROTEIN IN SACCHAROMYCES-CEREVISIAE.

L5 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Tissue-specific inhibition of oxidative phosphocyclation to cause  
male-sterility in **plants**

L5 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Chemical regulation of male sterility in crop **plants**

=> d l5 ibib ab

L5 ANSWER 1 OF 5 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
ACCESSION NUMBER: 1998:323638 BIOSIS  
DOCUMENT NUMBER: PREV199800323638  
TITLE: Development of infrared imaging to measure thermogenesis in  
cell culture: Thermogenic effects of **uncoupling**  
protein-2, troglitazone, and beta-adrenoceptor agonists.  
AUTHOR(S): Paulik, Mark A. [Reprint author]; Buckholz, Richard G.;  
Lancaster, Mary E.; Dallas, Walter S.; Hull-Ryde, Emily A.;  
Weiel, James E.; Lenhard, James M. [Reprint author]  
CORPORATE SOURCE: Dep. Metabolic Diseases, GlaxoWellcome Inc., 5 Moore Drive,  
Research Triangle Park, NC 27709, USA  
SOURCE: Pharmaceutical Research (New York), (June, 1998) Vol. 15,  
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CODEN: PHREEB. ISSN: 0724-8741.  
DOCUMENT TYPE: Article  
LANGUAGE: English  
ENTRY DATE: Entered STN: 22 Jul 1998  
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AB Purpose. Although the effects of thermogenic agents in cell culture can  
be measured by direct microcalorimetry, only a few samples can be analyzed  
over several hours. In this report, we describe a robust non-invasive  
technique to measure real-time thermogenesis of cells cultured in  
microtiter plates using infrared thermography Methods. Yeast were  
**transformed** with **uncoupling** protein-2 (UCP2) or exposed  
to carbonyl cyanide p-(trifluoromethoxy)phenylhydrazine (FCCP) or  
rotenone. Adipocytes were exposed to rotenone, FCCP, cycloheximide,  
troglitazone, or CL316243. Thermogenesis was measured using infrared  
thermography. Results. Thermogenesis increased after exposing yeast to  
the mitochondrial uncoupler, FCCP, or **transforming** the cells  
with UCP2. Further, thermogenesis in adipocytes was stimulated by  
CL316243, a beta3-adrenoceptor agonist being developed to treat obesity.  
The protein synthesis inhibitor, cycloheximide, did not inhibit  
CL316243-mediated thermogenesis. In contrast, the mitochondrial proton  
transport inhibitor, rotenone, inhibited thermogenesis in yeast and  
adipocytes. Similarly, the antidiabetic agent, troglitazone, suppressed  
thermogenesis in adipocytes. Although increased UCP synthesis  
resulted in increased thermogenesis in yeast, UCP expression did  
not correlate with thermogenesis in adipocytes. Conclusions. The  
results, taken together with the high resolution (0.002degreeC) and  
robustness (384-well format) of the approach, indicate infrared-imaging is  
a rapid and effective method for measuring thermogenesis in vitro.

=> d l5 1-5 ibib ab

L5 ANSWER 1 OF 5 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
ACCESSION NUMBER: 1998:323638 BIOSIS  
DOCUMENT NUMBER: PREV199800323638